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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/666,200

09/18/2003

Hun Choi

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EXAMINER

BEAUCHAINE, MARK J

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/666,200	Applicant(s) CHOI, HUN	
	Examiner Mark J. Beauchaine	Art Unit 3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claims 1-8 and 23-25 are objected to because of the following informalities:

The term "first and second sensor" (claim 1, line 18; and claim 23, line 8) is improper grammar.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8, 17-20, 21 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The terms "second sensing hole" (claim 1, line 11; and claim 17, line 9), "second sensor" (claim 17, line 13; and claim 21, line 9), "sensor" (claim 18, line 2), "coin sorting member" (claim 31, line 6), and "coin receiving member" (claim 31, lines 8 and 9) lack sufficient antecedent bases.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 5-9, 11, 13-17, 19, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patent Number US 7,048,623 B2 by Perkitny ("Perkitny") in view of Patent Number 3,002,601 by Reis ("Reis") in view of Patent Number US 6,371,845 B1 by Ishida ("Ishida") in view of Patent Number 5,271,586 by Schmidt ("Schmidt"). The coin sorting apparatus disclosed by Perkitny comprises coin sorting/separation member 110 (see Figure 4) having separation holes 114a-e of different sizes for sorting coins according to size of the coins, guide 64 configured to transfer the coins sorted by the coin sorting means to a predetermined location (see Figure 1C), coin receiving tube 36 disposed on an end portion of the guide (see Figure 1A) for receiving the coins transferred from the guide, and receiving container 32 for receiving the coin receiving tube. Perkitny further discloses motor 44, a rotational shaft that is driven by said motor and is coupled to carrier container 62 provided with carrier holes, and separation member 60.

Perkitny fails to disclose a first sensor. Reis teaches a coin sorting apparatus comprising first sensor 18 formed to be offset from center of guide 16 (see Figure 2) for the purpose of counting the number of coins being sorted (see column 2, lines 57-60). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the first sensing means of Reis into the coin counting apparatus of Perkitny for the purpose of counting the number of coins being sorted.

Perkitny fails to disclose a second sensor/sensing hole configuration. Chiba teaches a coin counting apparatus comprising sensor/sensing hole 21 provided at coin receiving container 4 and sliding projection 43-1 (see Figures 1 and 3 and column 6, line 16-27) for the purpose of detecting the presence of said container within the apparatus. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the sensor/sensing hole configuration of Chiba into the apparatus of Perkitny for the purpose of detecting the presence of said container within the apparatus.

Perkitny fails to disclose a sliding member/groove configuration. Schmidt teaches a structure comprising a sliding member/groove configuration comprising sliding member 20 that is provided with a sliding groove and engages with sliding projection/extending portion 26. Schmidt further teaches elastic member 34 disposed around said extending portion to create a frictional force against plate 14 for the purpose of inserting and withdrawing sliding element 3. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the

sliding member/groove configuration of Schmidt into the apparatus of Perkitny for the purpose of inserting and withdrawing said container.

Perkitny fails to disclose a microcomputer. The coin sorting apparatus disclosed by Ishida comprises microcomputer 11 configured to control the coin sorting apparatus in accordance with a signal from first sensing means 18 (see Figure 1) for the purpose of monitoring the number of coins counted by the apparatus. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the microcomputer of Ishida into the coin sorting apparatus of Perkitny for the purpose of monitoring the number of coins counted by the apparatus.

Perkitny fails to disclose a control/display part. Reis teaches control/display part 54 for controlling and displaying an operation state of the coin sorting means for the purpose of notifying an operator of the apparatus condition. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the control/display part of Reis into the coin counting apparatus of Perkitny for the purpose of notifying an operator of the apparatus condition.

Claims 2 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perkitny in view of Reis in view of Ishida in view of Schmidt as applied to claims 1 and 9 above, and in further view of Patent Number 6,021,883 by Casanova et al ("Casanova"). Perkitny/Reis/Ishida/Schmidt fails to disclose a speaker. Casanova teaches a coin processing apparatus incorporating a speaker (column 4, line 67) configured to make a predetermined sound according to an operation state of the coin sorting means for the

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purpose of notifying a user of an operating condition of the apparatus. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the speaker of Casanova into the apparatus of Perkitny/Reis/Ishida/Schmidt for the purpose of notifying a user of an operating condition of the apparatus.

Claims 4, 12 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perkitny/Reis/Ishida/Schmidt as applied to claims 1, 9 and 17 above, and further in view of Patent Number 5,989,118 by Chiba et al ("Chiba").

Perkitny/Reis/Ishida/Schmidt fails to disclose an optical sensor. Chiba teaches a coin counting apparatus comprising optical sensor for counting the number of coins being sorted for the purpose of notifying and operator of a total count of coins. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the sensor of Chiba into the apparatus of Perkitny/Reis/Ishida/Schmidt for the purpose of notifying an operator of a total count of coins.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pertitny in view of Ishida in view of Patent Number 2,740,242 by Downey ("Downey"). The coin sorting apparatus disclosed by Perkitny comprises coin sorting member 110 (see Figure 4) configured to sort coins according to the size of the coins, guide 64 configured to transfer the coins sorted by the coin sorting member to a predetermined location (see Figure 1C), coin receiving tube 36 disposed on an end portion of the guide (see Figure

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1A) configured to receive the coins transferred from the guide, and receiving container 32 configured to receive the coin receiving tube.

Perkitny fails to disclose a sensor/microcomputer configuration. Ishida teaches sensing means 43-1, 43-2, 43-3 for detecting if coin receiving tubes 41-1 through 41-5 are positioned on a location for appropriately receiving coins by sensing a displacement of coin receiving container 4, and microcomputer 11 for controlling the coin sorting apparatus in accordance with a signal from said sensing means, for the purpose of ensuring that coins are properly processed. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the sensor/microcomputer configuration of Ishida into the apparatus of Perkitny for the purpose of ensuring that coins are properly processed.

Perkitny fails to disclose a sensor configured to detect said coin receiving container in a plurality of positions. Downey teaches a coin processing device comprising a series of coin receiving tubes/container 21 at first location C and a second location B (see Figures 1 and 3), and a sensor 103 configured to detect if said tube is positioned in said first and second locations (see column 4, lines 21-25, 49-53 and 69-75) for the purpose of determining the position of coin containers within said device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the sensor configuration of Downey into the apparatus of Perkitny for the purpose of determining the location of coin containers within the apparatus.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Perkitny in view of Ishida in view of Downey as applied to claim 21 above, and further in view of Reis. Perkitny/Ishida/Downey fails to disclose a sensor/display configuration. Reis teaches a coin counting and sorting apparatus comprising sensor 18, 19 and 20 for counting the number of coins being sorted by said apparatus, and display device 31, 32 and 33 for displaying the number of sorted coins in accordance with a signal detected by said sensing means, for the purpose of notifying an operator of the amount of sorted coin processed by the apparatus. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the sensor/display configuration of Reis into the apparatus of Peritny/Ishida/Downey for the purpose of notifying an operator of the amount of sorted coin processed by the apparatus.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Perkitny in view of Ishida in view of Downey. The coin sorting apparatus disclosed by Perkitny comprises coin sorting means 110 (see Figure 4) for sorting coins according to size of the coins, coin receiving tube 36, and receiving container 32 for receiving the coin receiving tube. Perkitny further discloses user interface 17 for controlling the coin sorting apparatus.

Perkitny fails to disclose a first sensor/microcomputer configuration. Ishida teaches first sensor 18 for counting the number of coins processed by the apparatus, and microcomputer 11 for controlling the coin sorting apparatus in accordance with a signal from said first sensor for the purpose of ensuring that coins are properly

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processed within the apparatus. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the first sensor/microcomputer configuration of Ishida into the apparatus of Perkitny for the purpose of ensuring that coins are properly processed within the apparatus.

Perkinty fails to disclose a second sensor. Downey teaches a coin processing device comprising a series of coin receiving tubes/container 21 at first location C and a second location B (see Figures 1 and 3), and second sensor 103 configured to detect if said tube is positioned in said first and second locations (see column 4, lines 21-25, 49-53 and 69-75) for the purpose of determining the position of coin containers within said device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the second sensor configuration of Downey into the apparatus of Perkitny for the purpose of determining the location of coin containers within the apparatus.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Perkitny in view of Ishida in view of Downey as applied to claim 23 above, in further view of Casanova. Perkitny/Ishida/Downey fails to disclose a speaker. Casanova teaches a coin processing apparatus incorporating a speaker (column 4, line 67) for making a predetermined sound according to an operation state of the coin sorting means for the purpose of notifying a user of an operating condition of the apparatus. It would have been obvious to one of ordinary skill in the art at the time the invention was made to

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incorporate the speaker of Casanova into the apparatus of Perkitny/Ishida/Downey for the purpose of notifying a user of an operating condition of the apparatus.

Claims 25-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perkitny in view of Ishida in view of Downey as applied to claim 23 above, and further in view of Reis. Perkitny/Ishida/Downey fails to disclose a control/display part. Reis teaches control/display part 54 having a plurality of buttons and a display part for controlling and displaying an operation state of the coin sorting member for the purpose of notifying an operator of the apparatus condition. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the control/display part of Reis into the coin counting apparatus of Perkitny/Ishida/Downey for the purpose of notifying an operator of the apparatus condition.

Claims 31 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patent Number US 6,772,870 B2 by Sugai et al ("Sugai") in view of Downey. The coin processing apparatus disclosed by Sugai is operated by separating coins by size when motor 88 is operated and coin receiving member 73 is in a first location, detecting the number of sorted coins by size, stopping an operation of coin sorting member 31 when it is detected that a predetermined number of coins having a predetermined size is sorted (column 4, lines 23-32) and displaying an image to let the user identify a stop operation (via display 9).

Sugai fails to disclose the step of operating again the coin sorting member when said coin receiving member is displaced to a second position. Downey teaches a coin processing device that is operated by depositing coins in coin receiving member 21 at first location C, stopping said depositing step when it is detected that a predetermined number of coins is deposited, and operating again said depositing step when said coin receiving member is displaced to second location B (see Figures 1 and 3, and column 4, lines 21-25, 49-53 and 69-75) for the purpose of determining the position of the coin receiving member within said device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the operation of Downey into the operation Sugai for the purpose of determining the location of said coin receiving member within the apparatus.

Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugai in view of Downey as applied to claim 31 above, and further in view of Patent Number US 6,484,863 B1 by Molbak ("Molbak"). Sugai/Downey fails to disclose the stopping of the sorting operation when the number of coins being sorted is not increased for a predetermined time. Molbak teaches a sorting operation that stops a coin sorting operation after no coin is detected for a predetermined time (column 19, lines 22-24) for the purpose of conserving power used by the apparatus. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the sorting stop operation of Molbak into the operation of Sugai/Downey for the purpose of conserving power used by the apparatus.

Response to Arguments

Applicant's arguments with respect to claims 9-13, 15, 16 and 21-33 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark J. Beauchaine whose telephone number is (571)272-6934. The examiner can normally be reached on 8:00AM through 5:00PM Mondays through Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick H. Mackey can be reached on (571)272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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